September 4, 2003

CCN 44757

Ms. Kathleen E. Hain, Director
Environmental Restoration Division
U.S. Department of Energy
Idaho Operations Office
850 Energy Drive, MS 1222
Idaho Falls, ID 83401-1563

CONTRACT NO. DE-AC07-99ID13727 - TRANSMITTAL OF THE NUMERICAL VALUE OF THE
SOIL-TO-WATER PARTITION COEFFICIENT (K_d) FOR PLUTONIUM AT THE INEEL WHITE
PAPER

Dear Ms. Hain:

This letter transmits nine copies of the subject document, three for you and your staff and three each for
delivery to the Idaho Department of Environmental Quality and the U.S. Environmental Protection
Agency. The white paper represents an independent review by outside Idaho National Engineering and
Environmental Laboratory (INEEL) subject matter experts of the K_d values used at the INEEL for risk
assessments. The report concludes that a soils K_d value for plutonium of 5,100 mL/g for WAG 7 is
technically supportable and defensible based on several sources of evidence.

If you have any questions or comments, please contact Frank Webber at 526-8507 or Jean Holdren at
526-6901.

Sincerely,

Frank Webber for

John M. Schaffer, Project Director
RWMC Completion Project

FLW:mp

Enclosures

cc: (w/o Enc.)
        S. S. Crawford, INEEL, MS 3810
        R. J. Hoyles, NE-ID, MS 1221
        B. D. Shipp, INEEL, MS 3898
        J. G. Snook, NE-ID, MS 1222
        S. G. Stiger, INEEL, MS 3898

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bcc: (w/o Enc.)
        M. P. Hodel, MS 3940
        K. J. Holdren, MS 3920
        B. G. Meagher, MS 3920
        T. J. Meyer, MS 3920
        E. R. Neher, MS 3930
        F. L. Webber, MS 3920
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        J. M. Schaffer Letter File (JMS-105-03)

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